

AVIONICS TECHNICIAN SERIES

Code No.	Class Title	Occ. Area	Work Area	Prob. Period	Effective Date
3172(3882)	Avionics Technician	06	004	6 mo.	02/05/85
3174(3998)	Master Avionics Technician	06	004	6 mo.	02/05/85

Promotional Line: 188

Series Narrative

Employees in positions allocated to this series perform or supervise construction, inspection, testing, modification, repair, maintenance, and installation of avionic systems (such as transceivers, navigation and radar equipment, auto pilots, altimeters and transponders). They may also design and install interface systems, calibrate circuitry, and construct bench mock-ups used for testing.

DESCRIPTION OF LEVELS OF WORK

Level I: Avionics Technician **3172(3882)**

Employees in positions allocated to this class construct and maintain avionic equipment. They work under the direct supervision of a Master Avionics Technician or other designated supervisor.

An Avionics Technician typically--

1. inspects, maintains, calibrates, repairs, constructs, and installs avionics radio equipment
2. performs troubleshooting to identify electronic problems and provides preventative maintenance of avionic equipment
3. calibrates test equipment and records calibration as required by the Federal Aviation Administration
4. constructs mock-ups for testing, repairing, calibrating, or overhauling avionics equipment
5. checks, calibrates, and certifies equipment as required by federal aviation regulations
6. maintains aviation electronics tools and equipment (such as wire coding tools and precision and calibration instruments)
7. monitors inventory of parts and recommends purchases to replace supplies
8. designs and installs interface systems for new or additional avionic systems
9. trains students and other personnel in avionics maintenance as necessary

Level II: Master Avionics Technician**3174(3998)**

Employees in positions allocated to this class supervise the construction and maintenance of avionic equipment. They also construct and maintain avionics equipment requiring a high degree of skill. Employees in these positions work under the general supervision of a designated supervisor.

A Master Avionics Technician typically--

1. supervises and inspects the work of lower level technicians In the maintenance, repair, overhaul, calibration, and installation of avionic equipment
2. reviews work performed for compliance with manufacturing specifications and Federal Communications Commission and Federal aviation regulations
3. reviews and procures technical manuals and other materials to ensure compliance with current methods, procedures, and regulations
4. supervises maintenance of aviation electronics tools and equipment; maintains calibration and inspection records for special tools and equipment as required by the Federal Aviation Administration
5. supervises and constructs mock-ups for testing, repairing, calibrating, and/ or overhauling avionics equipment
6. designs interface systems for installation of new or additional avionic systems and supervises installation in aircraft
7. consults with owners/operators of aircraft concerning the purchase, design, modification, construction, installation, maintenance, repair, overhaul, and/ or calibration of avionics equipment
8. inspects, maintains, repairs, and/or installs communications units used in airport vehicles
9. performs other related duties as assigned

MINIMUM ACCEPTABLE QUALIFICATIONS REQUIRED FOR ENTRY INTO:**Level I: Avionics Technician****3172(3998)****CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER**

1. any one or any combination of the following types of preparation
 - (a) training in an aviation electronics curriculum in a recognized trade or vocational school
 - (b) college course work in aviation electronics
 - (c) experience in electronic work, half of which included trouble shooting and repair of civil aircraft radio communications or avionics equipment

that total 1.0 unit according to the following conversion rates -

12 months of "A" = 1.0 unit

12 semester hours of "b" = 1.0 unit

24 months of "c" = 1.0 unit.

Amounts of training or experience less than those listed above should be converted to decimal equivalents of 1.0 unit and added together when computing combinations of the different types of preparation.

2. eligibility for a general radio/telephone Federal Communications Commission license at time of appointment and possession of the license before completion of six-month probationary period

PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

1. knowledge of electronic testing equipment associated with avionics, including frequency meters, signal generators, localizer generators, oscilloscopes
2. knowledge of current technological advances in avionics equipment, materials, and practices
3. knowledge of the operation, design, and/or repair of avionic digital equipment and instruments
4. ability to maintain avionic electronic equipment and related tools
5. ability to read and follow electronic schematic and logic diagrams
6. ability to use small hand tools and test equipment such as wirewrap tools, pliers, wrenches, oscilloscopes, voltmeters, and analyzers).
7. manual Dexterity

Level II: Master Avionics Technician

3172(3998)

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. possession of the requirements for the Avionics Technician class
2. any one or any combination of the following types of additional preparation:
 - (a) training in an aviation electronics curriculum in a recognized trade or vocational school
 - (b) college course work in aviation electronics
 - (c) experience in the maintenance, construction, troubleshooting, and repair of aviation electronic equipment

that totals 1.0 unit according to the following conversion rates-

12 months of "a" = 0.5 unit maximum*

12 semester hours of "b" = 0.5 unit maximum*

24 months of "c" = 1.0 unit.

Amounts of training or experience less than those listed above should be converted to decimal equivalents of 1.0 unit and added together when computing combinations of the different types of preparation.

3. possession of a general radio/telephone Federal Communications Commission license
4. eligibility for a Federal Aviation Agency Radio Repairman Certificate if required by the employing institution

PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

1. thorough knowledge of electronic testing equipment associated with avionics, including frequency meters, signal generators, localizer generators, and oscilloscopes
2. thorough knowledge of current technological advances in avionics equipment, materials, and practices
3. thorough knowledge of the operation, design, and/or repair of digital equipment and instruments
4. skill in the use of small hand tools and test equipment (such as wirewrap tools, pliers, wrenches, oscilloscopes, voltmeters, and analyzers)
5. ability to maintain avionics electronic equipment and related tools
6. ability to read and follow electronic schematic and logic diagrams
7. ability to supervise and coordinate the work of others
8. ability to maintain statistical inspection logs
9. manual dexterity

* Up to one half of the total preparation used to satisfy requirement #2 may be the type of training listed in "a" and/or "b"; the remainder of the preparation must be the type of experience listed in "c".

Avionics Technician
Master Avionics Technician

(Revised: Change in Title from Aircraft Radio Repairman)
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